# AN ANNOTATED KEY TO DESCRIBED SPECIES OF THE NEOTROPICAL GENUS GLYPTOLENUS (CARABIDAE: PTEROSTICHINI: AGONI)

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#### ABSTRACT

The Neotropical agonine genus Glyptolenus Bates is briefly redefined to include certain species heretofore assigned to Colpodes MacLeay. All described species are keyed, and the following data are given for each: major literature citations; type-locality; label data and type-depository; and notes on distribution and relationship. Type-localities are restricted for some species. Lectotypes are designated for all names not borne by clear holotypes. All undescribed species known to me are treated parenthetically in the key and briefly mentioned in the discussion of closely related forms. Of 19 species-group names recognized as valid, 12 are new combinations in Glyptolenus. Four other names are treated as synonyms, the following 3 as new synonymies: G. chalybaeus Dejean 1831 (= G. lebioides Bates 1878); and G. ruficollis Chaudoir 1878 (= G. cayennensis Chaudoir 1878, = G. viridinitens Oberthür 1883).

Bates (1878) described the genus Glyptolenus to contain G. rugicollis, an agonine with grooved tarsi and tibiae. In 1882 and 1884, he transferred 3 species with these characteristics from Colpodes to Glyptolenus, and added 2 new species: G. ater (Chaudoir), G. janthinus (Dejean), G. latitarsis Bates, G. nigrita (Chaudoir), and G. transformatus Bates. Only 1 additional species has since been placed in Glyptolenus, the West Indian G. simplicicollis Darlington.

During my study of Mexican *Colpodes* type material in London and Paris in 1968, I found Bates' interpretation of the genus to be illusory. Chaudoir (1878) keyed a section of *Colpodes* on the canaliculate structure of the tibia, correctly disregarding presence or absence of longitudinally directed median sulci on the dorsal surfaces of the tarsal articles. This arrangement is reflected in his collection, with species recognized as *Glyptolenus* by Bates interspersed with many other species in which the tarsi are not distinctly sulcate.

This paper extends my treatment of Mexican *Platynus* (1973), in which I characterized *Glyptolenus* as Agoni (*sensu* Lindroth 1966) with anterior tibia externally canaliculate and male genitalia basally melanistic. This diagnosis is sufficient to distinguish *Glyptolenus* from all other Agoni genera of the World.

Glyptolenus is an exclusively New World genus; I plan a detailed revision of the species of Mexico and Central America, but have no plans to revise the South American species. I here treat all names referable to the genus, in essentially the same format as in my Platynus paper except that the discussion for each included form is more extended. I have examined type material for each included name, and here designate lectotypes as appropriate. In the key

to described species, parenthetic characteristics are given to help distinguish the described forms from all undescribed forms known to me. Types in the Oberthr collection are located by box, column, and row (e.g., 298/1/2).

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## Key to Described Species of Glyptolenus

1. 1'.	Elytral interval 3 at most bisetose, apical seta absent
2(1). 2'.	Tarsal articles 1-4 sulcate dorsomedially
3(2). 3'.	Elytral apex rounded4 Elytral apex spinose; South America G. spinosus (Reiche)
4(3). 4'.	Anterior pronotal seta present
5(4).	Pronotum not rugose; elytral striae distinctly punctate; (lateral pronotal explanation narrow, impunctate; pronotal front angle weakly produced); Central America
5'.	Pronotum strongly rugose; lateral pronotal margin angulate at middle; South America
6(4').	Elytral striae impunctate; lateral pronotal explanation developed strongly only at base; West Indies
6'.	Elytral striae distinctly punctate; lateral pronotal explana- tion strongly developed throughout; (elytral striae strongly punctate); Central America
7(1').	Elytron piceous or aeneopiceous; pronotum not rugose; anterior pronotal seta present; pronotal hind angle well developed
7′.	Combination of characters not as above9

8(7).	Apices of elytral intervals concave or striate; elytron piceous or rufopiceous, slightly iridescent; South America
8′.	Apices of elytral intervals flat to convex; (elytral striae strongly punctate; tarsal articles 1-4 deeply sulcate dorso-medially); South America
9(7'). 9'.	Pronotum not strongly rugose
10(9). 10'.	Anterior pronotal seta absent
11(10). 11′.	Elytron black or piceous; Central America G. ater (Chaudoir) Elytron bright blue to blue-black
12(11'). 12'.	Elytron bright blue; elytral microsculpture formed of dense transverse lines; elytral intervals strongly convex; Central and South America
13(10'). 13'.	
14(13). 14'.	Elytral microsculpture formed of dense lines; (elytron blue-green to bright blue, not bright green); Central and South America [=lebioides Bates]
15(13'). 15'.	Lateral pronotal margin not or slightly sinuate behind, hind angle rounded or obtuse
16(15). 16'.	Pronotal hind angle rounded, posterior seta far forward; (elytron brightly colored, not aeneopiceous)
17(16). 17'.	Elytron bright blue; South America G. azureipennis (Chaudoir) Elytron blue-green; South America G. cyclothorax (Chaudoir)
18(16′).	Elytral microsculpture formed of dense lines; (tarsal articles 1-4 deeply sulcate dorsomedially); South America
18′.	Elytral microsculpture more open; South America
19(15′).	Lateral pronotal margin strongly sinuate, hind angle nearly right; tarsal articles 1-4 deeply sulcate dorsomedially; eye large; elytron cupreoaeneous; South America

constricted, lateral margin more strongly sinuate; South
America [=purpureovarius Motschoulsky]......G. azureus (Dejean)
Pronotum more transverse, base less strongly constricted,

#### ANNOTATED LIST OF SPECIES

Glyptolenus aereipennis (Chaudoir), new combination.

Dyscolus aereipennis Chaudoir 1850:388. Type-locality: "Brazil", restricted by Chaudoir (1859) to Brazil, Rio de Janeiro: Nova Friburgo. Type: lectotype male, here designated, first male (first specimen) in series of 9 specimens labelled "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/1), MNHP.

Colpodes aereipennis: Chaudoir 1859:358; Chaudoir 1878:379; Csiki

1931:747; Blackwelder 1944:37.

Specimens of this South American species key readily to couplet 18; *G. affinis* and various undescribed forms that also key to couplet 18 differ by having extremely dense, fine elytral microsculpture. I have examined 16 additional specimens of *G. aereipennis* from various localities in eastern Brazil, including specimens in MNHP from Nova Friburgo collected after Chaudoir's works were published. Localities are: Brazil, Bahia: Cachimbo. Rio de Janiero: Nova Friburgo; Rio de Janeiro. Santa Catarina: Nova Teutonia. [Not located]: Caraça.

Glyptolenus affinis (Chaudoir), new combination.

Colpodes affinis Chaudoir 1878:379; Csiki 1931:747; Blackwelder 1944:37. Type-locality: Venezuela, Distrito Federal: Caracas. Type: holotype male labelled "14 e sect. b." and "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/2), MNHP.

Specimens of this South American species key readily to couplet 18, and differ from the related *G. aereipennis* by having much finer and denser elytral microsculpture. I have examined just 1 additional specimen from

"Venezuela", in the Bates collection, MNHP.

I have seen 4 specimens of 1 or perhaps several related undescribed species. These specimens are smaller and differ by having tarsal articles 1-3 not or slightly sulcate dorsomedially. Localities are: Bolivia, Cochabamba: Chapare, Alta Palmar (JNeg) 1; Yungas, Puente Villa (JNeg) 1. Ecuador, Pichincha: Quito (IRSB) 1. Venezuela, Merida: Merida (USNM) 1. The Ecuador specimen has bright blue rather than green elytra. The Venezuela specimen has the head, pronotum, and appendages including the basal antennal articles dark rather than rufous as in the Bolivian specimens. I suspect these 4 specimens are conspecific, but that they represent a species distinct from G. affinis.

Glyptolenus apicestriatus (Reiche), new combination.

Anchomenus apicestriatus Reiche 1843:75. Type-locality: "Colombia". Type: lectotype male, here designated, labelled "Colombia", "Anchomenus apicestriatus Reiche Rev. ent. 1843", and "Ex Musaeo Chaudoir"; in Chaudoir collection (298/2/3), MNHP.

Colpodes apicestriatus: Chaudoir 1878:381; Csiki 1931:748; Blackwelder 1944:37 (as apicestriata).

A second male in the Chaudoir collection, MNHP, is labelled "14 sect. a." and is a paralectotype. I have not seen additional material of this highly distinctive form, the only member of the genus with the apices of the elytral intervals concave or striate. Specimens of this species should key readily. Glyptolenus apicestriatus probably is closely related to G. affinis and G. nitidipennis.

Glyptolenus ater (Chaudoir).

Colpodes ater Chaudoir 1859:358; Chaudoir 1878:380. Type-locality: Mexico, Veracruz: Toxpam. Type: lectotype male, here designated, labelled "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/6), MNHP.

Glyptolenus ater: Bates 1882:99; Csiki 1931:766; Blackwelder 1944:41.

Specimens of this species are readily distinguished as keyed. I have examined 47 specimens of this species from various localities in Mexico, Guatemala, and Panama.

Glyptolenus azureipennis (Chaudoir), new combination.

Colpodes azureipennis Chaudoir 1859:355; Chaudoir 1878:377; Csiki 1931:748; Blackwelder 1944:38. Type-locality: Brazil, Rio de Janeiro: Nova Friburgo. Type: lectotype female, here designated, labelled "Bresil Bescke" and "Ex Musaeo Chaudoir"; in Chaudoir collection (297/6/3), MNHP.

I have seen but 4 specimens of this species, all in MNHP. A paralectotype female (stated to be a male in original description) is labelled "Colombie". Two other specimens are labelled "Oberhalb Muzo Dr. Otto Thieme IV. 1887". A specimen in the Oberthür material placed with azureipennis material and labelled "Colombie" and "... Mniszech" is conspecific with G. cyclothorax. Also, I have labelled a specimen in IRSB previously identified as G. azureipennis as G. cf. affinis because its pronotal hind angles are distinct; this specimen was not, however, compared with type material, and I may not have it keyed properly through couplet 17.

Glyptolenus azureus (Chaudoir), new combination.

Colpodes azureus Chaudoir 1859:354; Chaudoir 1878:377; Csiki 1931:748; Blackwelder 1944:38 (as azurea). Type-locality: "Colombia", here restricted to Colombia, Cundinamarca: Bogota. Type: lectotype male, here designated, labelled "male" (green), "Anchomenus" (green), "azureus in Colombia" (green), and "Ex Musaeo Chaudoir"; in Chaudoir collection (297/6/1), MNHP.

Ophryodactylus purpureovarius Motschoulsky 1864:308. Type-locality: Venezuela, Distrito Federal: Caracas. Type: lectotype male, here designated, labelled "Ophriodactylus purpureovarius Motsch." and "Ex Musaeo Chaudoir"; in Chaudoir collection (297/6/1), MNHP.

Colpodes purpureovarius: Chaudoir 1878:377 (synonymy).

I examined 35 specimens of G. azureus from the following localities: Bolivia, Cochabamba: Yungas del Palmar. Colombia, Cundinamarca:

Bogota; "Tequendauria". VENEZUELA, Distrito Federal: Caracas.

I also examined a specimen from Ecuador, Loja: Loja (MNHP) in which the front tibiae are not canaliculate though the hind tibiae are: I cannot decide if this specimen is conspecific with G. azureus, but it definitely is closely related.

Known distributions of G. azureus and G. purpuripennis are separated by the entire length of Central America, yet where they occur they seem to be abundant. Though superficial differences are rather slight, the 2 forms probably are reproductive isolates.

Glyptolenus chalybaeus (Dejean), new combination.

Anchomenus chalybaeus Dejean 1831:720. Type locality: "Brazil" (also "Guadeloupe"), here restricted to Brazil, Rio de Janeiro: Nova Friburgo. Type: lectotype female, here designated, labelled "male" (green), "chalybaeus mihi in Brafilia D. Latreille" (green), "Anchomenus" (green), "Ex Musaeo Chaudoir"; in Chaudoir collection (298/2/1), MNHP.

Colpodes chalybaeus: Chaudoir 1859:357; Chaudoir 1878:381; Csiki

1931:750; Blackwelder 1944:38 (as chalybaea).

Colpodes lebioides Bates 1878:599; Bates 1882:129; Csiki 1931:756; Blackwelder 1944:39. Type-locality: NICARAGUA, Chontales: [locality not specified]. Type: lectotype female, here designated, labelled "Chontales" and "Colpodes lebioides Bates"; in Bates collection (372/4/3), MNHP. New

synonymy.

This is a widespread, geographically varied species, and is closely related to G. ruficollis. Central American specimens tend to be more greenish as in ruficollis, but with head and pronotum dark; the lebioides specimens tend to have dark femora and stronger bluish or aeneous luster on the head and pronotum, but the lectotype of chalybaeus also has dark femora (unlike most other South American specimens). I examined 40 specimens from various localities in Dominica, Guadeloupe, Costa Rica, Panama, and Brazil.

I have also examined 2 specimens from the Mexican states of Chiapas and Veracruz (UASM) which may be conspecific with G. chalybaeus but which have bright green elytra. I tentatively regard them as representative of an

undescribed species.

Glyptolenus cyclothorax (Chaudoir), new combination.

Colpodes cyclothorax Chaudoir 1878:377; Csiki 1931:752; Blackwelder 1944:38. Type-locality: "Colombia". Type: lectotype female, here designated, labelled "13° sect." and "Ex Musaeo Chaudoir"; in Chaudoir collection

(297/6/4), MNHP.

There is 1 additional specimen of cyclothorax in the Chaudoir collection labelled "Colombie" and "... Mniszech", but it is placed under azureipennis. Another specimen in MNHP was not compared with the type but runs without difficulty through my key to cyclothorax; it is from Peru: Chanchamayo [Not located]. Glyptolenus azureipennis and G. cyclothorax are closely related, and they may be conspecific.

Glyptolenus janthinus (Dejean).

Anchomenus janthinus Dejean 1831:721. Type-locality: "Bresil". Type: holotype male labelled "Anchomenus", "janthinus mihi h in Brasilia D. Lacordaire", and "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/8), MNHP.

Colpodes janthinus: Chaudoir 1859:357; Chaudoir 1878:381.

*Glyptolenus janthinus:* Bates 1882:98; Bates 1884:282; Csiki 1931:766; Blackwelder 1944:41.

This species is distinctive, abundant, and widespread. I examined 18 specimens from various localities in Costa Rica, Panama, and Brazil.

Glyptolenus latelytra (Darlington), new combination.

Colpodes latelytra Darlington 1935:199; Blackwelder 1944:39. Typelocality: Jamaica, Blue Mountains. Type: holotype female labelled "Main Range Blue Mts. 5-7388 ft. Aug. 17-19", "Jamaica 1934 Darlington", and "22011 M.C.Z. Holotype Colpodes latelytra D."; in MCZ.

Darlington originally compared his specimen of *G. latelytra* with 2 specimens of *G. chalybaeus* from Guadeloupe, Gourbegre (MCZ), but did so inaccurately: in *chalybaeus* the anterior pronotal setae are present (not absent as stated by Darlington); and the type of *latelytra* is a female (cited as a male by Darlington). Specimens of this species should key with no difficulty. I suspect its closest relatives are *G. ater* and *G. janthinus*, but the elytral microsculpture near apex and base is much more open and only slightly transverse. I have seen 1 other specimen, a male from Jamaica, Green Hills (USNM).

Glyptolenus latitarsis Bates.

Glyptolenus latitarsis Bates 1884:282; Csiki 1931:266; Blackwelder 1944:41. Type-locality: Panama, Chiriqui: Boquete. Type: holotype male labelled "TYPE H.T.", "Sp. figured", "Boguete, 3500 ft. Champion", etc.; in BMNH (375/2/4).

One additional specimen (Panama, Chiriqui: Volcan de Chiriqui) is in the Bates collection, MNHP. I tentatively consider as conspecific three further specimens: Mexico, Chiapas: 3.1 mi. s. Pueblo Nuevo (UASM) 2; 1.5 mi. n. Pueblo Nuevo (UASM) 1. The Mexican specimens differ from the type by having darker appendages and by less narrowed lateral pronotal explanations.

Specimens of *G. latitarsis* should key with no difficulty, but this species, *G. nigritus*, and *G. transformatus* belong to a rather large complex of species most of which are not yet described. I have examined 1 specimen of an undescribed form distinguished from *G. latitarsis* by much wider lateral pronotal explanations and by more strongly developed pronotal front angles: Mexico, Oaxaca: 16.9 mi. s. Valle Nacional (UASM).

Glyptolenus nigritus (Chaudoir).

Colpodes nigrita Chaudoir 1878:380. Type-locality: "Amerique meridionale". Type: holotype female labelled "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/7), MNHP.

Glyptolenus nigritus: Bates 1882:98; Csiki 1931:766; Blackwelder 1944:41.

This species is close to *G. latitarsis*, *G. transformatus*, and at least 2 additional undescribed Central American species. I have seen no additional specimens of *G. nigritus*, but have examined 2 specimens of an apparently undescribed South American form which is closely related. These specimens differ from the type of *nigritus* by having a non-rugose pronotal disc and by having broad, punctate lateral pronotal explanations. Localities are: Peru, San Martin: Moyobamba (MNHP) 1; Huallaja, Aguaytia (JNeg) 1.

Glyptolenus nitidipennis (Chaudoir), new combination.

Dyscolus nitidipennis Chaudoir 1850:384. Type-locality: "Colombia". Type: lectotype female, here designated, first of 2 females labelled "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/7), MNHP.

Colpodes nitidipennis: Chaudoir 1859:357; Chaudoir 1878:381; Csiki

1931:758; Blackwelder 1944:39.

The only specimens of this form seen by me are the 2 specimens in the Chaudoir collection and 1 in the Bates collection (MNHP), none with specific locality data.

Glyptolenus purpuripennis (Chaudoir), new combination.

Colpodes purpuripennis Chaudoir 1878:377; Bates 1882:129; Csiki 1931:761; Blackwelder 1944:40. Type-locality: "Oaxaca", here restricted to MEXICO, Oaxaca: Cerro de Plumas (see Bates 1882). Type: lectotype male, here designated, labelled "Ex Musaeo Chaudoir"; in Chaudoir collection (297/6/2), MNHP.

I have examined specimens of this species from various localities in upland parts of the Mexican states of Chiapas, Guerrero, and Oaxaca. It is closely related to G. azureus, but distributions of the 2 forms apparently are widely

disjunct.

Glyptolenus rivalis (Chaudoir), new combination.

Colpodes rivalis Chaudoir 1878:380; Csiki 1931:761; Blackwelder 1944:40. Type-locality: Brazil, Rio de Janeiro: Petropolis. Type: lectotype female, here designated, 1 of 2 specimens labelled "Ex Musaeo Chaudoir"; in Chaudoir

collection (298/1/5), MNHP.

During my visit to London and Paris in 1968, I distinguished 5 forms in a South American complex centered about G. rivalis; I do not know how many of these are distinct species, but I have seen some samples in which 2 forms are present. The type of G. rivalis has the elytral striae strongly punctate, and tarsal articles 1-3 strongly sulcate dorsomedially; another form has the tarsal articles faintly sulcate, and 3 forms have the striae less strongly punctate. The latter 3 forms differ from one another in density of elytral microsculpture, and in size of posterolateral pronotal impressions.

In addition to the type specimens, I have seen 15 specimens from Brazil with the above specified characters of G. rivalis: Brazil, Parana: Bocaiuva (UASM) 13. Rio de Janeiro: Nova Friburgo (MNHP) 1. Santa Catarina: Nova

Teutonia (JNeg) 1.

Glyptolenus ruficollis (Chaudoir), new combination.

Colpodes ruficollis Chaudoir 1878:379; Csiki 1931:762; Blackwelder 1944:40. Type-locality: Brazil, Rio de Janeiro: [locality not specified]. Type: lectotype (?female), here designated, labelled "Ex Musaeo Chaudoir"; in Chaudoir collection (298/1/3), MNHP.

Colpodes cayennensis Chaudoir 1878:380; Csiki 1931:750; Blackwelder 1944:38. Type-locality: French Guiana, Cayenne. Type: holotype male labelled "14e sect. b." and "Ex Musaeo Chaudoir"; in Chaudoir collection

(298/1/4), MNHP. New synonymy.

Colpodes viridinitens Oberthür 1883:54. Type-locality French Guiana, Cayenne. Type: holotype female labelled "Cayenne Dr. Nodier", "Colpodes viridinitens R. Oberthür TYPE Col. novit. I. p. 54"; in Oberthür collection (298/1/3), MNHP. Placed next to type of ruficollis. New synonymy.

The Chaudoir collection contains only the type specimens of ruficollis and cayennensis, while the Bates collection contains 2 specimens of cayennensis from "Cayenne" and 1 of ruficollis without locality data; the cayennensis specimens differ from the ruficollis specimens by having narrower and more piceous pronota. However, other specimens in the Oberthür collection, all from French Guiana, indicate that the distinction does not hold. The type of viridinitens has the form of ruficollis but the color of cayennensis; 1 specimen from Gourdonville has the form of cayennensis but the color of ruficollis; and 3 specimens from Passoura and 2 from Roches de Kourou have the form and color of ruficollis.

Both Blackwelder and Csiki listed *ruficollis* from Mexico and Guatemala, attributed to Bates (1882:125); the Bates record pertains to *Colpodes ruficornis*, and *G. ruficollis* is not known from Central America. Neither Blackwelder nor Csiki listed *viridinitens*, and I am indebted to G. E. Ball for finding the original description for me.

Glyptolenus ruficollis and G. chalybaeus are related, similar, and sympatric in South America where they are distinguished readily by the open microsculpture of ruficollis.

Glyptolenus rugicollis Bates.

Glyptolenus rugicollis Bates 1878:595; Bates 1882:98; Csiki 1931:766; Blackwelder 1944:41. Type-locality: NICARAGUA, Chontales: [locality not specified]. Type: holotype female labelled "Chontales" and "Glyptolenus rugicollis Bates"; in Bates collection, MNHP.

Bates (1882) confused at least 2 and probably 3 species under the name G. rugicollis; his records from El Tumbador and Las Mercedes, Guatemala, refer to an undescribed form. In true G. rugicollis the pronotum has 2 pairs of marginal setae, has the base relatively broad and hind angles denticulate, and has the lateral margins more or less angulate at the middle. I have seen 3 specimens with these characteristics: Nicaragua, Chontales: [locality not specified] (MNHP) 1, holotype. Costa Rica, Cartago: Turrialba (USNM) 1. Panama, Chiriqui: Volcan de Chiriqui (BMNH) 1.

Glyptolenus simplicicollis Darlington.

Glyptolenus simplicicollis Darlington 1934:97; Blackwelder 1944:41. Type-locality: Dominica, Laudet. Type: holotype male labelled "Laudet Dominica, B. W. I. June 9 1911" and "Holotype Glyptolenus simplicicollis Darl."; in AMNH.

The absence of the terminal seta of elytral interval 3 implies that this species is related to *G. latitarsis*, *G. nigritus*, and *G. transformatus*, but the relationship probably is not close. In form, and in particular in the narrow pronotal explanations, *G. simplicicollis* more nearly resembles the group that includes *G. ater*, *G. janthinus*, and *G. latelytra*. I have not seen additional material of this species.

Glyptolenus spinosus (Reiche), new combination.

Agonum spinosus Reiche 1843:77. Type-locality: "Colombia". Type: lectotype female, here designated, labelled "14 e sect. b." and "Ex Musaeo Chaudoir"; in Chaudoir collection (297/6/6), MNHP.

Colpodes spinosus: Chaudoir 1859:360; Chaudoir 1878:378; Csiki 1931:763; Blackwelder 1944:40 (as spinosa).

I have seen no additional specimens of this fine species, the only member of the genus with spinose elytral apices.

Glyptolenus sulcipennis (Chaudoir), new combination.

Colpodes sulcipennis Chaudoir 1878:377; Csiki 1931:764; Blackwelder 1944:40. Type-locality: Colombia, Cundinamarca: Bogota. Type: holotype female labelled "13 esect." and "Ex Musaeo Chaudoir"; in Chaudoir collection (297/6/5), MNHP.

I have seen no other specimens of this distinctive form.

Glyptolenus transformatus Bates.

Glyptolenus transformatus Bates 1882:99; Csiki 1931:766; Blackwelder 1944:41. Type-locality: Guatemala, Quezaltenango: Cerro Zunil. Type: holotype female labelled "TYPE H.T.", "Cerro Zunil 4-5000 ft. Champion", etc.; in BMNH (375/2/3).

I have examined no further material of this species, but have seen 5 specimens of a related but undescribed species from the Mexican states of

Jalisco and Oaxaca in the Sierra Madre del Sur (UASM).

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